

FIG. 1A

FIG. 1A
FIG. 1B

Aptamer Selection

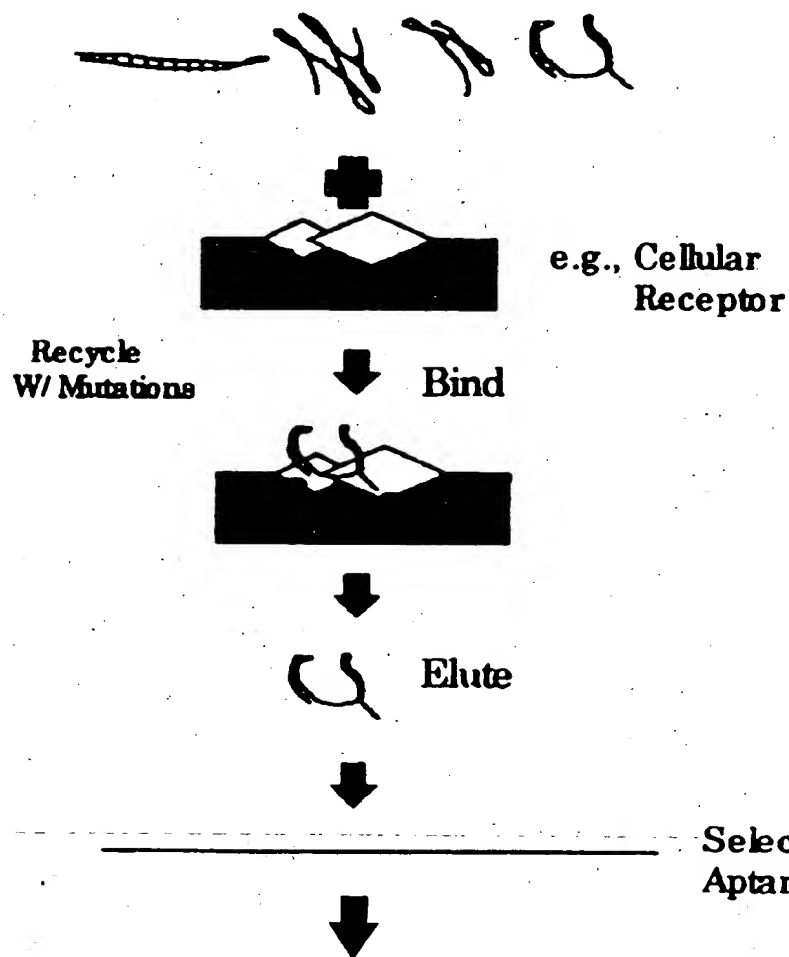
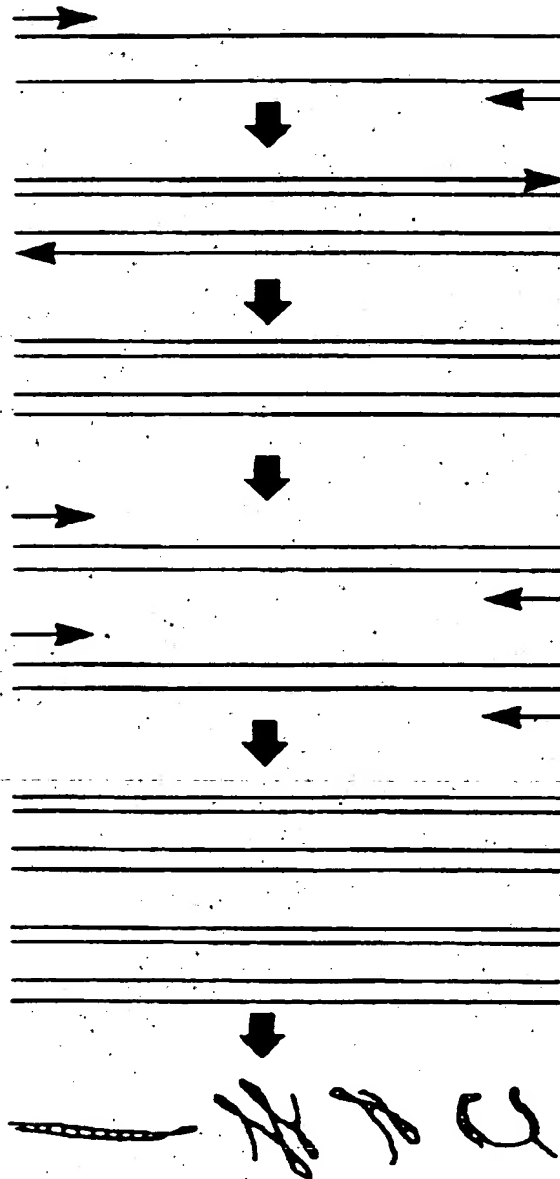


FIG. 1A

FIG. 1B

Aptamer Generation

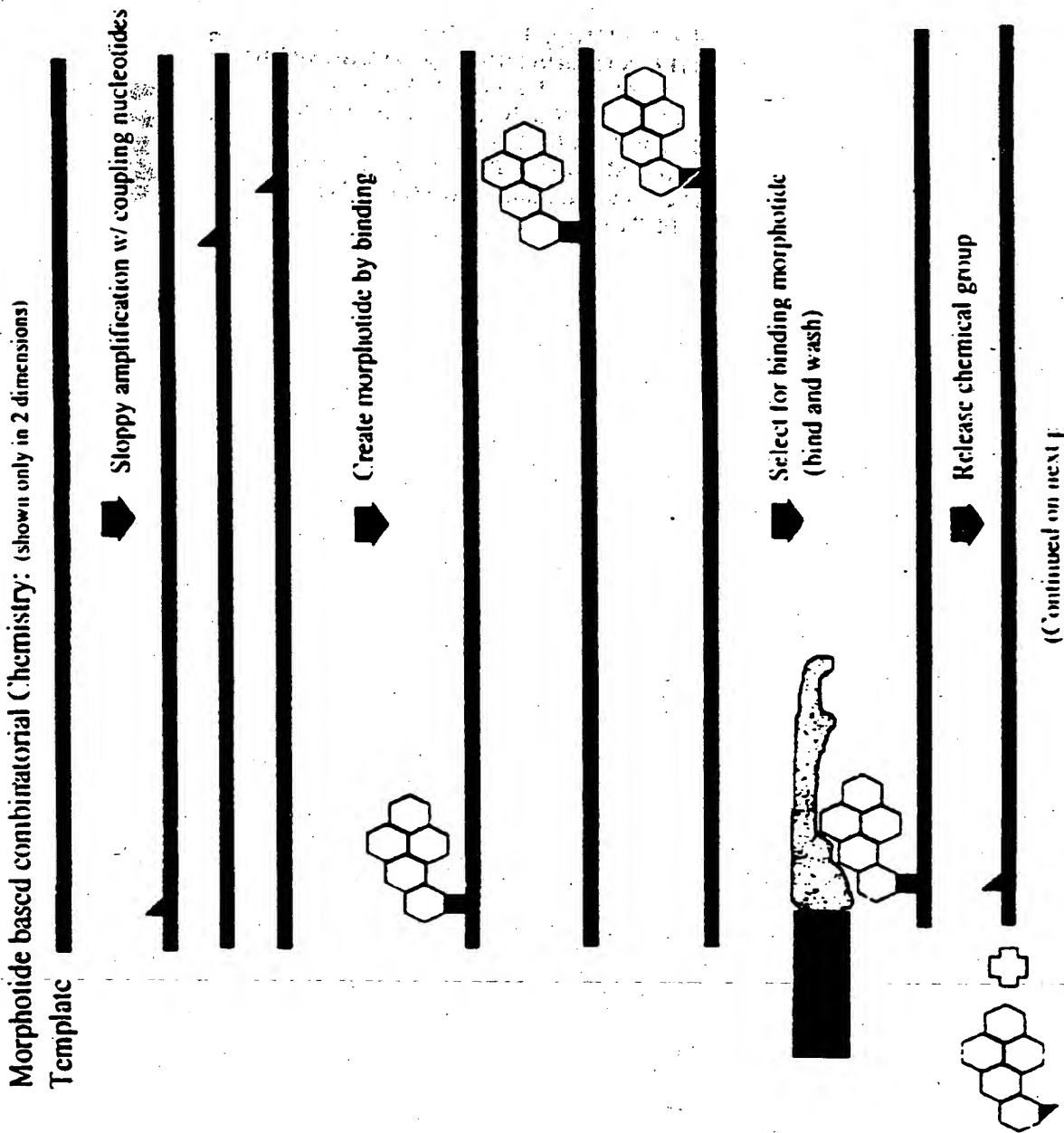


Aptamers

FIG. 2A

FIG. 2A

FIG. 2B



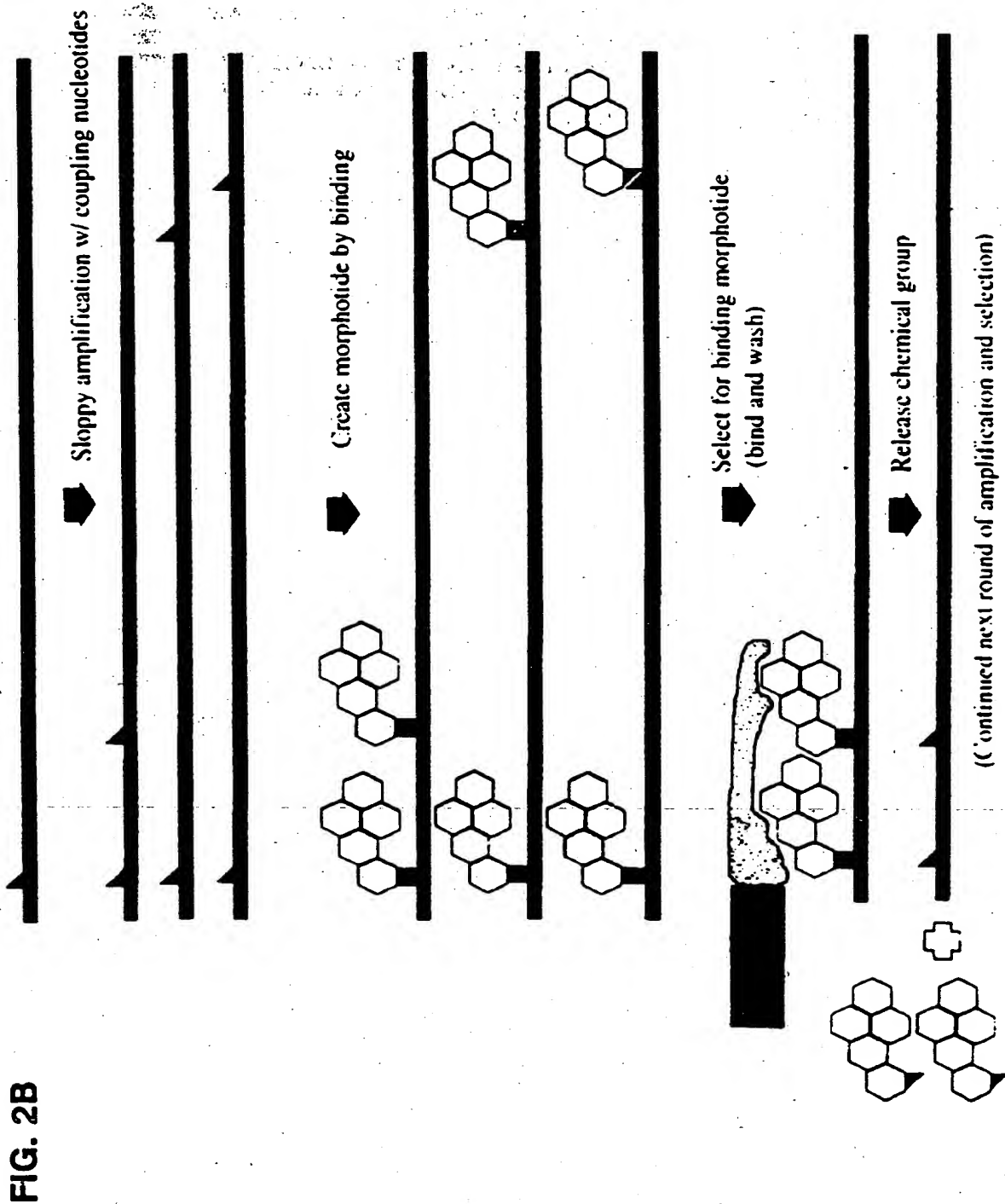


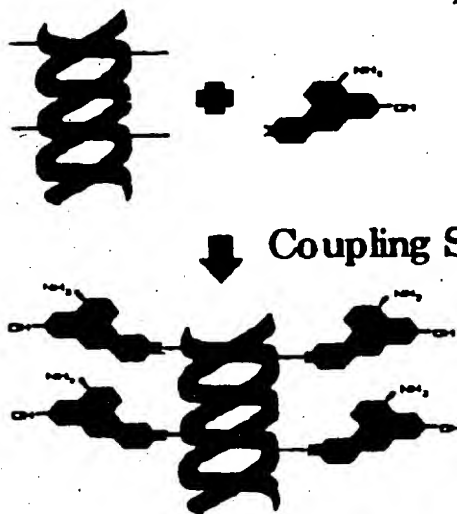
FIG. 3A

FIG. 3A

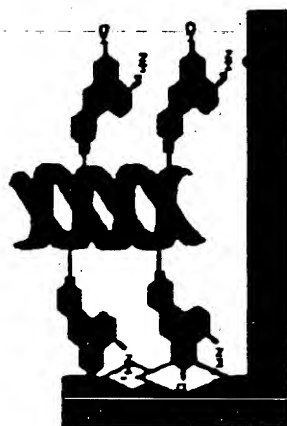
FIG. 3B

Reversible Coupler

Shape & Structure Library



Bind



Elute w/
pH Shift

e.g., Cellular
Receptor

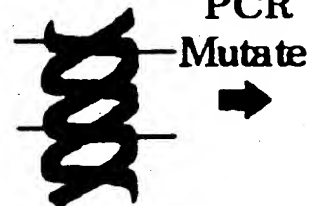


FIG. 3B

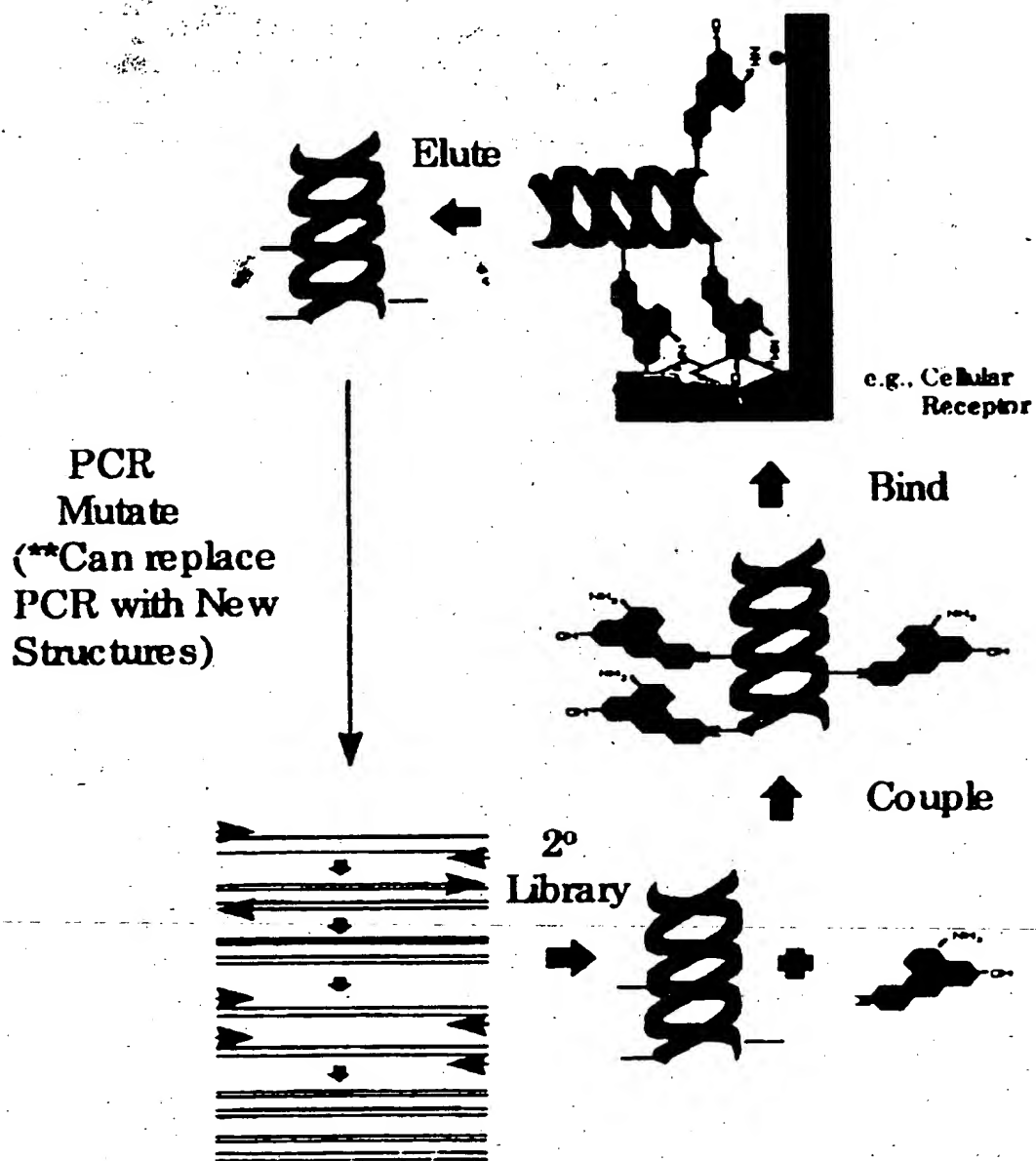
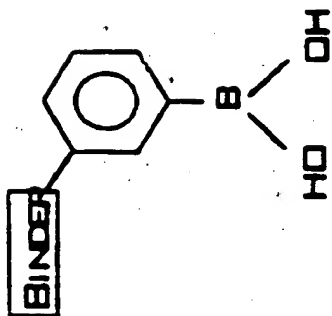


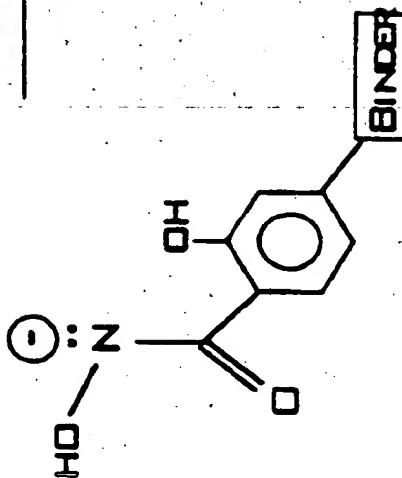
FIG. 4

Candidate bioconjugate:
Phenylboronic Acid

↙ STD. CHEMISTRY COUPLING TO ATTACH

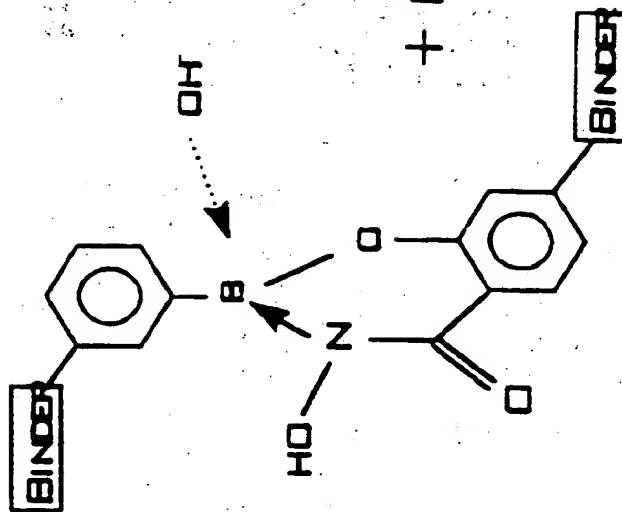


CONDENSATION



$pK_A = 4.2$
 $K_D = 10^{15}$

+ H₂O



REVERSIBLE COMPLEX 1.5 UNITS OF PH = DISSOCIATION BY HYDROLYSIS
CAN TRAP AT PH 8 & CAN RELEASE